

Results are expressed as cost per life year gained (LYG). **RESULTS:** The results for a hypothetical male with a 10-year risk of cardiovascular death of 5% are reported. Compared to no statin the incremental cost-effectiveness ratio (ICER) of rosuvastatin 10mg, atorvastatin 20mg, simvastatin 80mg branded, and simvastatin 80mg generic were €17,080/LYG, €27,090/LYG, €36,261/LYG and €19,206/LYG, respectively. Using atorvastatin 10mg, simvastatin 40mg branded, and simvastatin 40mg-generic reduces ICER to €20,348/LYG, €23,123/LYG and €13,454/LYG respectively. **CONCLUSION:** To obtain the same relative reduction in TC rosuvastatin 10mg seems more cost-effective compared to atorvastatin 20mg and simvastatin 80mg. Using higher doses of the same drug results in increased ICERs.

## PCV28

#### ECONOMIC EVALUATION OF AN INTERDISCIPLINARY APPROACH TO HEART FAILURE MANAGEMENT

Sutton SS<sup>1</sup>, Laws FA<sup>2</sup>, Franklin M<sup>1</sup>, Reeder CE<sup>1</sup>

<sup>1</sup>University of South Carolina, Columbia, SC, USA, <sup>2</sup>Dorn Veterans Hospital, Columbia, SC, USA

**OBJECTIVE:** To assess the utilization and costs of medical services before and after implementation of an interdisciplinary heart failure (HF) intervention in a Veterans Administration (VA) setting. **METHODS:** Retrospective electronic chart reviews were conducted to determine utilization and costs of medical treatment for 220 patients enrolled in a HF program at a VA medical center. Patients enrolled in the program must have been classified as NYHA class III or IV (or AHA/ACC Stage C or D), and have had at least two hospitalizations for heart failure within a one year period prior to enrollment. A comprehensive interdisciplinary management program, including physicians, nurse practitioners, case managers, and pharmacists, was implemented to initiate, manage, and monitor drug therapy regimens and patient outcomes. Utilization was measured by readmission to the hospital. Only direct medical costs were included in the analysis given that an institutional VA perspective was used. Total utilization and costs for all cause readmissions for HF patients were calculated for pre and post enrollment periods. **RESULTS:** In a cohort of 220 Stage III or IV HF patients, the average all-cause readmission rate per person per year declined from 3.2 prior to the implementation of the HF program to 1.2 for all cause readmission post enrollment. The decrease in readmission rates resulted in an estimated annual savings per patient of \$11,448. **CONCLUSIONS:** Enrollment of Stage III and IV HF patients in an interdisciplinary intervention program decreased the average number of readmissions per person per year from 3.2 to 1.2 (62.5% reduction). Savings from this intervention are estimated to be over \$11,000 per HF patient per year. Further research is being conducted to ascertain the specific effects of this program, its contribution to operational efficiency, its impact on quality of care, and its generalizability to other VA hospitals.

## PCV29

#### ANALYSES FOR PRICE AND UTILIZATION OF CALCIUM CHANNEL BLOCKERS IN US MEDICAID PROGRAMS

Chen Y, Guo JJ, Jing Y, Wigle PR

University of Cincinnati, Cincinnati, OH, USA

**OBJECTIVE:** To analyze price and utilization trends for Calcium Channel Blockers (CCB) drugs, and to compare the price difference between brand-name and generic CCB drugs over a specific time interval. **METHODS:** CCB drugs with an indication for hypertension were selected for this study. The First DataBank® drug files and National Medicaid Pharmacy data were used to calculate the monthly Average Wholesaler Prices (AWP), quar-

terly prescription use and reimbursement. Descriptive time-series trend analyses were performed to assess price trends and drug utilization patterns. The market shares were calculated as the proportion of total number of prescriptions. **RESULTS:** The average AWP per daily dose for CCBs included three tiers: the highest with \$2 or more per day for Cardizem®, Plendil®, and Procardia XL®, the lowest with \$1 or less per day for Isoptin® and verapamil, and middle for Norvasc® and Cardene®. The generic dilazem AWP decreased from \$0.84 in 1996 to \$0.34 in 2004, while its brand Cardizem AWP increased over time. Use of branded drugs (Calan®, Procardia, and Cardizem) decreased while use of generics (verapamil, nifedipine, and diltiazem) increased. The utilization of the dihydropyridine CCBs (e.g. Norvasc®, Procardia®) was about two-fold that of the non-dihydropyridine CCBs in 2004. Total expenditure for brand name drugs increased from \$28.87 million per quarter in 1991 to \$1.15 billion per quarter in 2004. The market-share of Procardia® decreased sharply from 64.26% in 1991 to 3.9% in 2001, while Norvasc® increased from 5.78% in 1993 to 73.98% in 2004. **CONCLUSIONS:** The generic AWP decreased due to competition, but there was little impact on its brand-name AWP. Increased use of Norvasc® might be associated with its safety profile. Decreased use of brand-name CCBs might be due to Medicaid policy of generic drug use.

## PCV30

#### TREND ANALYSIS OF PRICE AND UTILIZATION OF STATIN DRUGS IN U.S. MEDICAID PROGRAMS

Jing Y, Chen Y, Kelton CM, Guo JJ

University of Cincinnati, Cincinnati, OH, USA

**OBJECTIVES:** Statins are used to treat abnormal blood lipids for reducing cholesterol and are prescribed for the elderly and other high-risk populations. The objective of this study is to compare drug price, cost, utilization, and market-share trends across statin drugs in order to shed light on the effects of both interbrand and generic competition in the market for statins. **METHODS:** Using data from First DataBank, we calculated the monthly average wholesale price (AWP) per daily dose for each branded and generic statin drug over the period 1989–2002. We also analyzed national Medicaid pharmacy data to construct quarterly prescription numbers (and market shares by dividing by total number of statin prescriptions) and per-prescription reimbursement figures for each drug from 1991–2004. **RESULTS:** Total expenditure by U.S. Medicaid programs on statin drugs increased from \$ 41.8 million in 1991 to \$1.37 billion in 2003. The top three drugs reimbursed by Medicaid in 2004 included Lipitor, Zocor, and Pravachol, with market shares of 49.0%, 29.1%, and 9.7%, respectively. Whereas Zocor, Mevacor, and Pravachol have a relatively high AWP per daily dose (between \$4.00 and \$6.50 since 1993), the AWP for Lipitor is much lower. The rapid increase of Lipitor prescriptions was observed from 2290 in 1st quarter 1997 to two million in 2004. The average reimbursement per statin prescription in Medicaid increased from \$68.70 in 1991 to \$101.90 in 2004. While the generic lovastatin was introduced at two thirds the branded AWP, there is no drop in the price of Mevacor, though Medicaid does face a lower cost per prescription. **CONCLUSIONS:** Our results give little indication of effective interbrand competition in the statin market. Neither price nor utilization of other branded medications falls in response to new branded entry. The brand-name use decreased as its generic entry in Medicaid.